

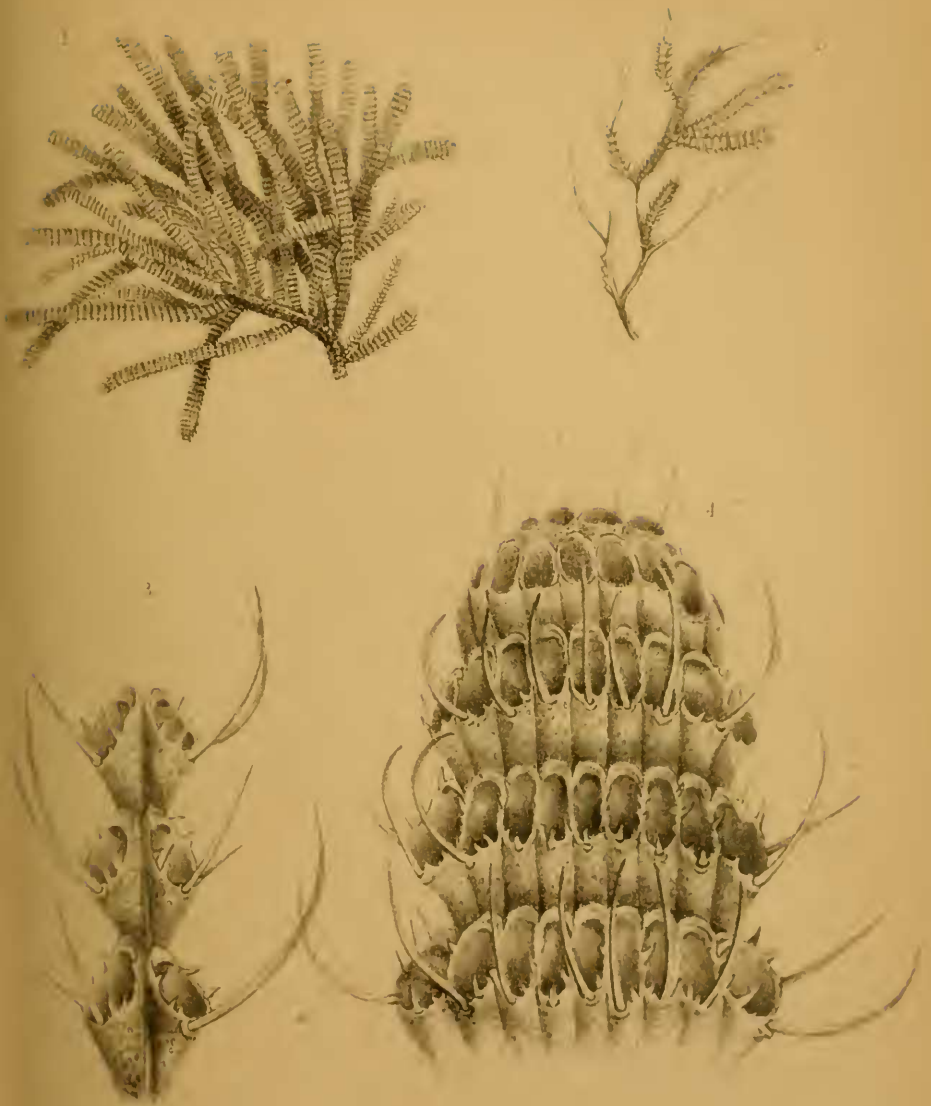
4. ON *ELECTRA VERTICILLATA*, WITH A NOTICE OF ITS DIFFERENT FORMS OF GROWTH. BY E. W. H. HOLDSWORTH, F.L.S., F.Z.S., ETC.

(Radiata, Pl. XIII.)

The fact that but little attention has been given to a remarkable variety of growth in *Electra verticillata* must be my apology for bringing before this Society an animal that was first noticed more than seventy years ago. Ellis described this species in 1786, under the name of "*Flustra verticillata*," or the "Basket-work Sea Matt," from a specimen that he received from the Mediterranean; and he was followed by other naturalists, who retained the same title for it. In 1824 Lamouroux's translated work '*Corallina*' was published in England, from which it appears that, observing the branched poly-pidoms and verticillate arrangement of the cells in this species, he proposed a genus for its reception under the name of *Electra*; and in this he was supported by many subsequent writers, including Risso, Cuvier, and Blainville,—the last-mentioned author, however, stating that *Electra* could hardly be separated from *Flustra*.

Its true position appears to be close to *Membranipora*, but distinct from it on account of the regular transversely linear arrangement of the cells under all its varieties of growth; this will especially distinguish it from *Flustra*, and in a less degree from *Membranipora*, where the quincuncial disposition of the cells is not so uniformly observed, and their arrangement is more frequently irregular. I am inclined to consider Lamouroux's view of the case correct, and shall therefore retain the name that he proposed for the genus.

Several naturalists have mentioned the occasional growth of *Electra* in subcompressed linear fronds; but the only published figures of the species that I know—those of Ellis, Lamouroux, and Blainville—are all taken from the cylindrical variety, which appears to have been considered as typical. My own experience of *Electra* rather points to this encrusting of slender branching sea-weeds as exceptional, and the suberect ribbon-shaped fronds as being the most common form. I have only observed the species in one locality however—on the northern shore of Portugal, near Oporto, where the free compressed variety is abundantly met with in a dried state on the beach; fourteen specimens were obtained of this shape, and only one was found of the cylindrical form usually described. The early growth of the polypidom, however, is undoubtedly encrusting, and generally on *Fucus*; but after the formation of a few cells on the surface, the erect form is assumed, and dense clusters of narrow ribbons spring up, with occasional branches budding from their edges, each ribbon being composed of a double layer of connected opposite cells, placed in transverse parallel rows of 10 or 12 in each. The cells are compressed and cup-shaped, with the walls minutely punctured, and have the margin surmounted by several irregularly placed erect denticles, and a long curved vibraculum inserted a little below the anterior edge. In the ribbon-shaped variety, these vi-



*ELECTOA VERTICILLATA*, Lamouroux  
*Electoa verticillata* Lamouroux, *Ann. Mus. Hist. Nat. Paris*,  
 1801, p. 10, pl. 1, fig. 1. — *Ann. Mus. Hist. Nat. Paris*,  
 1802, p. 10, pl. 1, fig. 1.